

1. A method for chemical or biochemical analysis of a target analyte in a target environment, **characterized in, that** the method comprises the steps of:
 - providing a test sample in or in contact with said target environment, which test sample upon interaction with said target analyte is chemically or biologically modified changing its spectral response;
 - illuminating said test sample using a program controlled display as a light source, which program controlled display is composed of at least one activated pixel providing the illumination from an illuminating area of said program controlled display;
 - detecting light emerging from said test sample by a detector coupled to said program controlled display, and
 - displaying test results originating from signals from said detector on said program controlled display.
2. A method according to claim 1, **characterized in, that** the step of providing a test sample comprises providing the test sample in the target environment.
3. A method according to claim 1, **characterized in, that** the step of providing a test sample comprises providing the test sample on said detector, whereby the electrical properties of said detector upon chemical or biochemical interaction with said target analyte is affected.
4. A method according to any of the preceding claims, **characterized in, that** the step of displaying signals comprises displaying resulting spectra.
5. A method according to claim 3, **characterized in, that** the step of displaying signals comprises displaying a chemical or biochemical image using a photocurrent colour coded scale.
6. A method according to any of the preceding claims, **characterized in, that** the method further comprises individually modulating the colour of each individual pixel by software.
7. A method according to any of the preceding claims, **characterized in, that** the method further comprises individually modulating the light intensity of each individual pixel by software.
8. A method according to any of the preceding claims, **characterized in, that** the method further comprises scanning the colour of each individual pixel within the visible range by software.

9. A method according to any of the preceding claims, **characterized in, that** the colour, size, shape, modulation and background colour of said illuminating area is configured through a user interface.
10. A method according to any of the preceding claims, **characterized in, that** the method further comprises displacing said illuminating area of said program controlled display over time.
11. A method according to any of the preceding claims, **characterized in, that** the step of displaying further comprises displaying said test results on a part of said program controlled display that is not used for illumination.
12. A method according to any of the preceding claims, **characterized in, that** the method further comprises placing a diffractive element between said program controlled display and said test sample.
13. A method according to claim 12, **characterized in, that** the method further comprises placing a collimating slit between said diffractive element and said test sample and scanning diffracted light through the collimated slit by displacement of said illuminating area.
14. A method according to any of the preceding claims, **characterized in, that** the method further comprises a step of evaluating said signals from said detector by software coupled to said program controlled display.
15. A method according to any of the preceding claims, **characterized in, that** the method further comprises a step of evaluating said signals from said detector through an on-line analysis by an expert or an expert system.
16. A method according to any of the preceding claims, **characterized in, that** the method further comprises controlling said program controlled display, said detector, said electronic device and said user interface by a computer.
17. A system for chemical or biochemical analysis of a target analyte in a target environment, **characterized in, that** said system comprises:
 - a test sample, which upon interaction with said target analyte is arranged to be chemically or biologically modified to change its spectral response;
 - a program controlled display arranged to be used as a light source for illumination of said test sample and to be used for displaying test results, and
 - a detector arranged to detect light emerging from said test sample and coupled to said program controlled display.

18. A system according to claim 17, **characterized in, that** said program controlled display is a cathode ray tube computer monitor or a liquid crystal display monitor.
19. A system according to claim 17 or 18, **characterized in, that** said test sample comprises molecules or materials specifically designed to show spectral changes upon chemical or biochemical reactions.
20. A system according to any of claims 17-19, **characterized in, that** said test sample comprises molecules or materials specifically designed to be used together with rgb-illumination.
21. A system according to any of claims 17-20, **characterized in, that** said test sample is an indicator deposited as a layer on a transparent substrate, in a cuvette or in a cavity of an analysis plate.
22. A system according to any of claims 17-20, **characterized in, that** said test sample is a detector gate.
23. A system according to any of claims 17-21, **characterized in, that** said detector is a web camera, a digital camera or a video camera.
24. A system according to any of claims 17-20 or 22, **characterized in, that** said detector is a semiconductor device, a conductive photo-sensitive detector, a polymer photo-detector or an ion-sensitive device.
25. A system according to any of claims 17-21 or 23, **characterized in, that** the system further comprises a holder for holding said test sample at a distance from said program controlled display.
26. A system according to any of claims 17-21 or 23 or 25, **characterized in, that** system further comprises a magnifying lens between said test sample and said detector.
27. A system according to any of the preceding claims, **characterized in, that** the system further comprises a diffractive element arranged to be placed between said program controlled display and said test sample.
28. A system according to claim 27, **characterized in, that** the system further comprises a collimating slit arranged to be placed between said diffractive element and said test sample.
29. A system according to any of the preceding claims, **characterized in, that** the system further comprises a focussing lens between said program controlled display and said test sample.